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Virginia Gross State Product, 1958 - 1978

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This study presents new estimates of Virginia gross state product (GSP) for 1978 and revisions for earlier years. Estimates of GSP for 1958 and 1959 have been made with the aid of newly available earnings data for those years on a place-of-work basis. Comparable estimates of GSP for 21 consecutive years enable for the first time an observation of change over two decades.

In current dollars, unadjusted for inflation, Virginia GSP increased from $8.0 billion in 1958 to $46.0 billion in 1978 (see Table 1). Average annual growth over the two decades was 9.1 percent.

Real Virginia GSP, or gross state product converted to 1972 dollars of constant purchasing power, rose from $12.5 billion in 1958 to $30.7 billion in 1978 (see Table 2). The average annual growth was 4.6 percent (see also Figure 1). The only decline in real GSP over the twenty-year period, 1.5 percent from 1974 to 1975, occurred at the time of a severe national recession. When the twenty year period is broken down into five year intervals it can be seen that recent growth in GSP has been below that of the earlier periods. Furthermore, although the Virginia economic growth rate has consistently exceeded the national figure, the relative difference narrowed in the most recent five year period.

	Average Annual Change (%)		
	Virginia Real GSP	Real GNP	Ratio of Real GSP to Real GNP
1958-63	4.5	4.1	1.10:1
1963-68	5.6	4.8	1.17:1
1968-73	4.9	3.3	1.48:1
1973-78	3.4	2.5	1.36:1

Gross state product is an estimate of the value of all goods and services produced in the state in one year. For purposes of comparison, GSP may be regarded as the state equivalent of GNP. The figures in this report supercede those published in earlier reports of the Tayloe Murphy Institute. The special derivation of farm product is described below. A statement of the complete methodology is available on request.

Among industrial components of real Virginia GSP, manufacturing rose from 18.7 percent of the total in 1958 to 21.1 percent in 1978; trade from 12.5 percent to 15.3 percent; finance, insurance, and real estate from 9.5 percent to 13.3 percent; transportation and public utilities from 8.0 percent to 9.2 percent; and services and other industries from 11.3 percent to 12.8 percent. The industrial sectors that decreased their shares of real GSP over the same period were mining (1.4 to 1.1 percent), construction (6.1 to 4.7 percent), government (27.4 to 20.8 percent), and farming (4.0 to 1.6 percent).

As measured by Virginia GSP, all industrial sectors except farming were larger percentages of their GNP counterparts in 1978 than in 1958. Table 3 presents Virginia GSP (current dollar) industrial components as percentages of their GNP counterparts, 1958 to 1978.

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Virginia GSP per capita (current dollars) grew from $2,051 in 1958 to $8,945 in 1978, while current dollar GNP per capita grew from $2,578 to $9,758 (see Table 4). Virginia GSP per capita as a percent of GNP per capita (both current dollar and real) was in the low 80's until the middle of the twenty-year period and stood in the low 90's for the last seven years of the period.

Gross farm product, a component of Virginia gross state product, is derived from the U.S. Department of Agriculture's state farm income statistics for Virginia. The concept of gross farm product is different from realized gross farm income and is different also from realized net farm income. The intermediate figures "value of total farm output" and "intermediate production expenses" are composed of specially selected statistics for consistency with the composition of gross national product. Government payments are omitted from the income side and hired farm labor is omitted from the expenditure side--in other words farm wages are included in the gross product figure.

The following table illustrates the computation of Virginia gross farm product for 1978 (current dollars).

	Millions of Dollars
Value of total farm output	
Cash receipts from marketings	1,231.5
Nonmonetary income	202.2
Other farm income	21.2
Net rent to nonoperating landlords	(19.9)
Net change in inventories	58.6
Subtotal	1,493.6
Intermediate production expenses	
Feed	176.3
Livestock purchased	41.4
Seed, plants, and bulbs	32.1
Fertilizer and lime	102.6
Repairs and operation of capital items	149.5
Miscellaneous operating expenses	170.4
Subtotal	672.3
Gross farm product	821.3

Figure 1.
Virginia Gross State Product, 1958-1978 (billions of 1972 dollars)

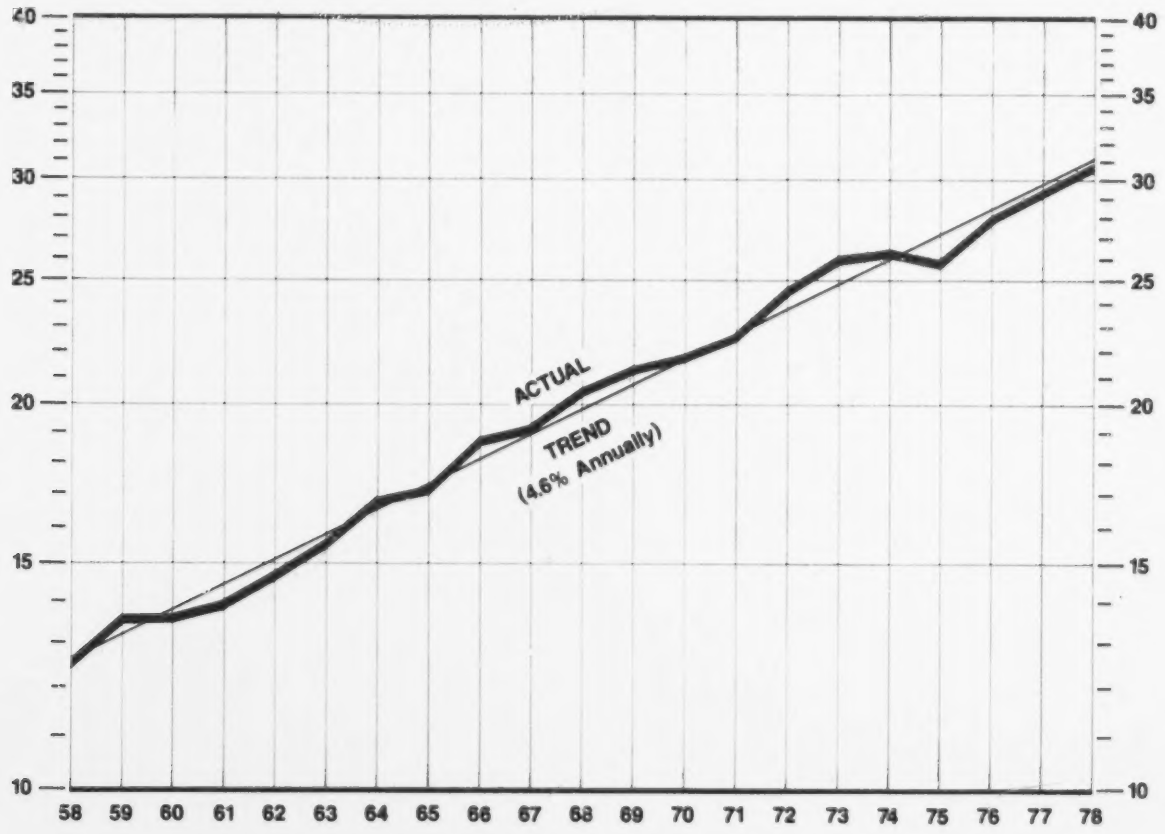

Table 1.
Virginia Gross State Product in Current Dollars, 1958 to 1978 (millions of current dollars)

Year	Mining	Construction	Mfg.	Trade	Finance, Insurance, & Real Estate	Trans. & Public Utilities	Services & Other Industries[a/]	Gov't	Farming	Total
1958	164.7	373.6	1,892.7	1,179.9	777.2	777.6	783.9	1,697.3	379.1	8,026.0
1959	174.1	402.3	2,143.0	1,305.0	997.9	849.6	864.3	1,785.9	322.8	8,844.9
1960	174.9	413.1	2,158.0	1,348.2	1,052.6	881.7	904.6	1,787.4	342.4	9,062.9
1961	173.3	455.5	2,221.1	1,396.5	1,113.0	899.6	954.1	1,913.3	345.1	9,471.5
1962	179.5	505.3	2,467.1	1,501.8	1,202.3	950.1	1,040.1	2,038.9	342.5	10,227.6
1963	193.8	579.3	2,593.0	1,596.7	1,326.9	1,013.2	1,143.2	2,249.5	261.8	10,957.4
1964	196.8	635.9	2,836.6	1,762.5	1,425.6	1,081.9	1,261.0	2,483.1	341.5	12,024.9
1965	192.8	712.5	2,635.2	1,916.0	1,542.7	1,168.2	1,363.8	2,603.1	338.9	12,473.2
1966	201.6	753.1	3,357.0	2,057.8	1,685.6	1,258.6	1,493.5	2,981.0	293.7	14,081.9
1967	210.2	756.9	3,219.9	2,215.4	1,793.1	1,327.3	1,663.6	3,425.8	340.3	14,952.5
1968	225.3	831.8	3,924.2	2,471.9	1,960.7	1,423.6	1,830.0	3,804.8	322.2	16,794.5
1969	240.8	933.0	4,073.8	2,734.2	2,162.4	1,534.6	2,032.4	4,331.5	357.6	18,400.3
1970	325.8	1,025.8	4,163.6	2,951.7	2,329.5	1,682.0	2,240.9	4,726.9	368.1	19,814.3
1971	336.3	1,144.2	4,472.0	3,310.1	2,637.5	1,876.3	2,482.1	4,995.0	369.3	21,622.8
1972	384.6	1,318.9	5,228.2	3,690.6	2,976.5	2,126.5	2,792.1	5,524.4	453.7	24,495.5
1973	427.3	1,612.3	5,742.5	4,229.8	3,256.8	2,405.6	3,171.2	6,025.4	621.5	27,492.4
1974	682.8	1,740.4	6,286.5	4,627.8	3,554.6	2,562.1	3,615.5	6,611.1	597.3	30,278.1
1975	833.4	1,712.4	6,322.4	5,170.6	3,797.4	2,825.8	3,988.6	7,264.4	597.1	32,512.1
1976	704.7	1,872.9	7,855.2	5,815.7	4,289.9	3,245.5	4,722.4	7,810.5	566.7	36,883.5
1977	916.7	2,079.9	8,731.1	6,333.3	5,071.6	3,622.3	5,335.1	8,418.3	539.9	41,048.2
1978	930.1	2,337.9	9,663.9	7,085.6	5,637.7	4,010.3	6,226.7	9,333.7	821.3	46,047.2

Source: Survey of Current Business, Vol. 59, No. 7 (July 1979), Tables 6.1 and 6.3 and the same numbered tables in the July 1976, 1977 and 1978 issues; revised unpublished tabulations received September 1979 from the U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Wealth Division; unpublished tabulations (Tables 4 and 44) BEA, Regional Economic Measurements Division, dated August 1979; U.S. Bureau of the Census, Annual Survey of Manufactures (selected editions) and Census of Manufactures (various years); U.S. Department of Agriculture, Economic Research Service, State Farm Income Statistics (selected editions, annual supplement to Farm Income Statistics, monthly).

a/ Other industries include agricultural services, forestry, and fisheries, plus "rest of the world," which consists of embassies, consulates, and United Nations Organization operations.

Table 2.
Virginia Gross State Product in Constant Dollars, 19

Year	Mining	Construction	Mfg.	Trade	Finance Insurance Real Esta
1958	179.6	757.8	2,342.5	1,692.8	1,192.
1959	200.8	811.1	2,597.6	1,840.6	1,482.
1960	199.9	827.9	2,578.3	1,880.3	1,527.
1961	197.4	893.1	2,644.2	1,923.6	1,610.
1962	209.0	962.5	2,916.2	2,062.9	1,757.
1963	231.0	1,066.9	3,135.4	2,178.3	1,832.
1964	234.0	1,158.3	3,425.8	2,343.8	1,913.
1965	235.1	1,250.0	3,155.9	2,524.4	2,051.
1966	246.2	1,251.0	3,949.4	2,651.8	2,136.
1967	252.6	1,213.0	3,696.8	2,731.7	2,205.
1968	266.3	1,277.7	4,355.4	2,915.0	2,323.
1969	278.7	1,245.7	4,418.4	3,031.3	2,477.
1970	356.1	1,218.3	4,332.6	3,146.8	2,537.
1971	366.3	1,245.0	4,517.2	3,381.1	2,736.
1972	384.6	1,318.9	5,228.2	3,690.6	2,976.
1973	382.9	1,455.1	5,586.1	4,005.5	3,134.
1974	407.4	1,440.7	5,485.6	3,911.9	3,294.
1975	411.4	1,260.0	5,001.9	3,974.3	3,265.
1976	318.9	1,352.3	5,915.1	4,292.0	3,502.
1977	377.7	1,410.1	6,236.5	4,469.5	3,898.
1978	351.5	1,452.1	6,485.8	4,698.7	4,079.

Source: The sources cited in Table 1, plus Survey of Current Business, Vol
July 1976, 1977 and 1978 issues; U.S. Bureau of Labor Statistics, Handbook
Employment in 19 (selected editions); U.S. Department of Agriculture, Agri
1975) pp. 453, 455; U.S. Department of Agriculture, Economic Research Servi

a/ Other industries include agricultural services, forestry, and fisheries
United Nations Organization operations.

58 to 1978 (millions of 1972 dollars)

&	Trans. & Public Utilities	Services & Other Industries[a/]	Gov't	Farming	Total
	1,002.1	1,415.0	3,422.0	502.9	12,506.7
	1,085.1	1,508.4	3,522.5	458.5	13,507.4
	1,116.1	1,522.9	3,417.6	488.9	13,559.6
	1,121.7	1,569.2	3,466.1	496.0	13,922.0
	1,177.3	1,648.3	3,491.3	477.3	14,702.5
	1,254.0	1,766.9	3,712.0	375.9	15,553.1
	1,325.9	1,879.3	3,954.0	506.0	16,740.7
	1,433.4	1,956.7	4,080.1	468.7	17,155.8
	1,542.4	2,037.5	4,496.2	361.4	18,672.3
	1,593.4	2,171.8	4,852.4	461.7	19,178.9
	1,704.9	2,253.7	4,928.5	414.3	20,438.9
	1,780.3	2,352.3	5,237.6	426.9	21,248.2
	1,875.1	2,465.2	5,371.5	434.3	21,737.5
	1,964.7	2,572.1	5,371.0	431.5	22,584.9
	2,126.5	2,792.1	5,524.4	453.7	24,495.5
	2,365.4	3,011.6	5,589.4	391.6	25,922.2
	2,352.7	3,154.9	5,784.0	385.5	26,217.0
	2,390.7	3,118.5	5,949.5	442.1	25,813.6
	2,547.5	3,462.2	6,087.7	415.9	27,893.6
	2,689.2	3,621.9	6,171.8	411.2	29,286.1
	2,824.2	3,918.6	6,401.7	494.3	30,706.3

59, No. 7 (July 1979), Table 7.15 and the same numbered table in the
f Labor Statistics (selected issues); U.S. Bureau of the Census, Public
ltural Statistics, 1975 (Washington, D.C.: Government Printing Office,
, Agricultural Prices, Annual Summary, 1978 (June 1979), pp. 6, 16-19.

plus "rest of the world," which consists of embassies, consulates, and

Table 3.
Virginia GSP as a Percent of U.S. GNP by Industrial Division, 1958 to 1978 (current dollars)

Year	Mining	Construction	Mfg.	Trade	Finance, Insurance, & Real Estate	Trans. & Public Utilities	Services & Other Industries	Gov't	Farming	Total
1958	1.328	1.779	1.529	1.569	1.278	1.920	1.715	3.604	1.831	1.788
1959	1.415	1.764	1.522	1.588	1.514	1.944	1.732	3.572	1.690	1.818
1960	1.388	1.781	1.500	1.594	1.502	1.925	1.710	3.347	1.695	1.791
1961	1.365	1.898	1.545	1.614	1.510	1.898	1.686	3.374	1.708	1.810
1962	1.402	1.974	1.566	1.627	1.526	1.893	1.700	3.337	1.671	1.814
1963	1.491	2.122	1.559	1.655	1.593	1.915	1.753	3.414	1.277	1.843
1964	1.469	2.141	1.588	1.677	1.607	1.922	1.771	3.488	1.769	1.892
1965	1.428	2.179	1.342	1.699	1.615	1.928	1.764	3.394	1.540	1.813
1966	1.430	2.110	1.555	1.691	1.630	1.930	1.770	3.450	1.283	1.870
1967	1.440	2.029	1.455	1.700	1.617	1.938	1.785	3.557	1.533	1.878
1968	1.473	2.029	1.623	1.709	1.626	1.932	1.801	3.526	1.426	1.934
1969	1.496	2.028	1.600	1.738	1.660	1.913	1.815	3.696	1.419	1.967
1970	1.872	2.128	1.663	1.764	1.662	1.974	1.854	3.661	1.421	2.017
1971	1.967	2.175	1.709	1.812	1.703	2.020	1.883	3.545	1.333	2.033
1972	2.035	2.274	1.810	1.835	1.779	2.053	1.928	3.566	1.418	2.092
1973	1.997	2.492	1.784	1.890	1.831	2.101	1.941	3.619	1.241	2.104
1974	2.140	2.575	1.879	1.901	1.827	2.095	1.976	3.638	1.244	2.143
1975	2.170	2.529	1.806	1.927	1.790	2.106	1.990	3.616	1.214	2.127
1976	1.658	2.514	1.948	1.960	1.824	2.148	2.081	3.557	1.221	2.167
1977	1.902	2.491	1.915	1.960	1.894	2.152	2.064	3.548	1.097	2.165
1978	1.688	2.348	1.898	1.965	1.887	2.102	2.101	3.605	1.380	2.164

Source: Same as Table 1.

Table 4.
Virginia GSP Per Capita and U.S. GNP Per Capita, 1958 to 1978 (current and 1972 dollars)

	Current Dollars			1972 Dollars		
	Virginia Per Capita	U.S. Per Capita	Virginia as a % of U.S.	Virginia Per Capita	U.S. Per Capita	Virginia as a % of U.S.
1958	$2,051	$2,578	80	$3,195	$3,902	82
1959	2,239	2,747	82	3,419	4,067	84
1960	2,274	2,812	81	3,412	4,094	83
1961	2,313	2,860	81	3,400	4,128	82
1962	2,447	3,036	81	3,517	4,303	82
1963	2,563	3,156	81	3,637	4,409	82
1964	2,760	3,327	83	3,842	4,577	84
1965	2,828	3,557	80	3,889	4,786	81
1966	3,160	3,852	82	4,190	5,018	83
1967	3,317	4,035	82	4,254	5,106	83
1968	3,685	4,358	85	4,484	5,278	85
1969	3,988	4,647	86	4,605	5,359	86
1970	4,252	4,820	88	4,665	5,276	88
1971	4,580	5,157	89	4,789	5,371	89
1972	5,130	5,624	91	5,130	5,624	91
1973	5,669	6,226	91	5,345	5,885	91
1974	6,167	6,684	92	5,340	5,761	93
1975	6,527	7,177	91	5,182	5,644	92
1976	7,301	7,929	92	5,521	5,930	93
1977	8,057	8,779	92	5,748	6,195	93
1978	8,945	9,758	92	5,965	6,417	93

Source: Same as Tables 1 and 2; U.S. Department of Commerce, Bureau of Economic Analysis, unpublished tabulation received April 25, 1979; Survey of Current Business, Vol. 59, No. 7, (July 1979), Table 6.2 and the same numbered tables in the July 1968, 1977 and 1978 issues; Survey of Current Business, part II, Vol. 59, No. 8, (August 1979), pp. 32, 48.